WHAT IS CLAIMED IS:

1. A fuel cell comprising:

an anode;

a cathode, the cathode and the anode being capable of receiving an electrolyte therebetween, the cathode and the anode being capable of having respective reactants passed over them; and

a bipolar plate, the bipolar plate being subdivided into a plurality of reaction areas, each of the reaction areas including a respective reactant inlet port and a respective reactant outlet port for each of the respective reactants, the bipolar plate being capable of having a heat transport medium passed therethrough via a heat transport medium inlet and a heat transport medium outlet port.

2. The fuel cell as recited in claim 1 wherein the electrolyte includes a polymer electrolyte membrane.

3. The fuel cell as recited in claim 1 wherein the heat transport medium includes water.

4. The fuel cell as recited in claim 1 wherein a first of the plurality of reaction areas is capable of having the heat transport medium passed therethrough via the heat transport medium inlet and outlet ports, and wherein a second of the plurality of reaction areas is capable of having a heat transport medium passed therethrough via a second heat transport medium inlet port and a second heat transport medium outlet port, and further comprising a flow control device configured to separately control respective flows of the heat transport medium over the first and second reaction areas.

5. The fuel cell as recited in claim 1 further comprising a flow control device configured to

vary a flow rate of the heat transport medium.

6. The fuel cell as recited in claim 1 further comprising a temperature measuring device configured to measure a respective temperature of each of the plurality of reaction areas.

7. The fuel cell as recited in claim 6 further comprising a flow control device configured to influence a flow of at least one of the respective reactants and the heat transport medium as a function of at least one of the respective measured temperatures.

8. A method of activating a fuel cell, the fuel cell including an anode, a cathode and a bipolar plate, the bipolar plate being subdivided into a plurality of reaction areas, the method comprising:

heating a first of the reaction areas to a reaction temperature by the heat transport medium;

providing reactants initially only to the first reaction area; and

providing a second of the reaction areas with the reactants after the second reaction area has been heated to the reaction temperature.

9. The method as recited in claim 8 wherein the providing the second of the reaction areas with the reactants is performed so that the reactants flow in succession over the first and second reaction areas.

10. The method as recited in claim 8 wherein the providing the second of the reaction areas with the reactants is performed so that the reactants flow over the first and second reaction areas in parallel.